

**Schapp, Stephen**

---

**From:** Schapp, Stephen  
**Sent:** Tuesday, November 17, 1998 8:54 AM  
**To:** Socash, Madeleine  
**Cc:** Eitingon, Daniel; Somerville, Una; Smythe, Judy  
**Subject:** Malcolm's Memo of November 10

Malcolm,

Attached is a brief response to your memo of November 10 regarding the business case for chip cards.

Stephen



Williamson | 198

**GOVERNMENT  
DEPOSITION  
EXHIBIT  
1432**

**Highly Confidential**  
Subject to Protective Order

**P-0589**

## MEMORANDUM

TO: Malcolm Williamson  
FROM: Stephen Schapp  
DATE: November 16, 1998  
SUBJECT: Chip Card Business Case

---

We are making good progress in developing a chip card business case for the February Board which will include the factors you mentioned in your memo. This note summarizes our current thinking and the approach we are taking:

### Scenarios and Implications

We are currently structuring several plausible future scenarios about fraud, competition and customer demand, and the effect of a chip migration on each of the scenarios. An international working group of Members last week supported the view that increasing competition and customer demand for convenience will be the key drivers, with fraud being an important consideration as well.

### Cost and Benefits

The Emerging Products strategy group is developing several financial models to assess the costs and benefits of:

- Staying with the status quo,
- Moving to chip in an orderly migration within normal terminal replacement cycles,
- Accelerating the migration to chip.

A database of assumptions at a global level has been created, and we are currently working with Central and Region staff to refine the assumptions for the eight countries that represent over 80% of Visa volume. The country assumptions will be aggregated back into the global model. We also are setting up meetings with key Members who are willing to share their financial data for moving to chip.

Key components of the financial model include:

- **Fraud:** Although skimming is currently a small percentage of total fraud, it is growing at rates of 35-40% or more in some markets. Current magnetic stripe and online solutions are ineffective in guarding against skimming. Our financial analysis will assess the impact of current worldwide average skimming growth rates, as well as possible future "runaway" growth rates.

**Highly Confidential**  
Subject to Protective Order

VIF7072056

Initial estimates show that a significant portion of the cost of implementing chip can be offset by the benefits of avoiding skimming and lost/stolen fraud, depending upon assumptions about the migration time frame and skimming growth rates.

- **Infrastructure Costs:** Our estimates of the chip migration costs include chip cards, acceptance devices, Issuer systems, Acquirer systems, and merchant systems. The cost of acceptance devices is a key factor - a positive business case can be achieved more quickly assuming only incremental costs of adding chip capability to acceptance devices during their normal replacement cycle, instead of bearing the total cost of replacing the device in responding to runaway fraud.
- **Benefits:** We are estimating the following benefits of migrating to chip:
  - ♦ Franchise protection - ability of chip and the Internet to help Members retain customers because they can provide higher value services than competing industries,
  - ♦ Increased revenue - from new or increased fees, as well as increased transactions,
  - ♦ Operating efficiencies - such as processing transactions offline.

Implicit in the business case is the assumption that we will bundle a migration to chip with other changes to the Visa payment service infrastructure, such as PIN or other cardholder verification methods. We are looking at whether the benefits of these additional components outweigh the incremental costs.

I would like to review our analysis with you in early December. I will follow up with Madeleine to set up a meeting.

Cc: Dan Eitingon  
Judy Smythe  
Una Somerville

**Highly Confidential**  
Subject to Protective Order

VIF7072057